Amendments to the Claims:

This listing of claims will replace all prior versions and listings of the claims in the above-captioned patent application:

Listing of Claims:

Claim 1 (Currently Amended): A clutchless refrigerant compressor of a variable displacement type comprising:

a compressor housing having therein a crank chamber, at least one cylinder bore, a suction chamber, and a discharge chamber, said suction chamber and a discharge chamber having an inlet port and an outlet port, respectively, for connecting the compressor to a refrigerating circuit;

at least one piston fitted into said at least one cylinder bore and reciprocating within said cylinder bore;

a drive shaft extending in the crank chamber in a direction parallel to said cylinder and said piston and rotatably born in the compressor housing, said drive shaft having an axial end portion protruding outward from the compressor housing, said axial end portion being for connecting an external driving source for receiving a driving power to rotate said drive shaft;
a rotor fixedly mounted on said drive shaft within said crank chamber to be rotatable together with said drive shaft;

a swash plate disposed around said drive shaft and connected to said rotor by a hinge connection at an angular position, as a hinge angular position, around said drive shaft so as to be rotatable together with said rotor and to be able to inclined from a plane perpendicular to a drive axis of said drive shaft, said swash plate making a nutating motion with an inclination angle by rotation together with said rotor, the inclination angle of said swash plate being variable between a predetermined minimum angle approximately equal to a zero angle and predetermined maximum angle;

a connecting mechanism connecting said swash plate to said piston for converting said nutating motion of said swash plate to reciprocating motion of said piston;

a control mechanism for controlling said inclination angle of said swash plate together or against said urging member by adjusting a pressure within said crank chamber to thereby control the displacement of said compressor;

determining means for determining the inclination angle of the swash plate to an initial angle when said drive shaft is stopped without being driven by the external driving source, the initial angle being selected larger than the predetermined minimum angle; [[and]]

an urging member providing an urging force to urge the swash plate so that the inclination angle becomes the predetermined minimum angle, wherein said inclination angle determining means comprises a stopper mounted on said drive shaft at an initial position on the drive axis to stop said swash plate from changing in inclination due to the urging force when said drive shaft is not driven by said external driving source, for defining an initial angle of the inclination angle of the swash plate, said stopper being variable in the position on said drive axis; and

releasing means for releasing the inclination angle determining means when compression work of the compressor is increased after said drive shaft is driven by the external driving source, wherein said releasing means comprises:

a detector for detecting a physical factor corresponding to compression work of said compressor;

a driver connected to said detector and said inclination angle determining means for, when said physical factor detected shows increase of said compression work, releasing said inclination angle determining means.

Claims 2-3 (Cancelled).

Claim 4 (Currently Amended): The clutchless refrigerant compressor as claimed in ~~claim 3~~ claim 1, wherein, when said physical factor detected shows increase of said compression work, said driver drives the stopper from said initial position in a direction of the drive axis to thereby permit said swash plate to move from said initial angle to the predetermined minimum angle due to the urging force from said urging member.

Claim 5 (Currently Amended): The clutchless refrigerant compressor as claimed in ~~claim 3~~ claim 1, wherein said detector is a rotating speed sensor for sensing a rotating speed of said drive shaft, which results in the compression work of said compressor.

Claim 6 (Currently Amended): The clutchless refrigerant compressor as claimed in ~~claim 2~~ claim 1, further comprising a fixed ring fixedly mounted on said drive shaft at an axial position on a side opposite to said rotor with respect to said swash plate, said fixed ring having a side surface facing said swash plate, said side surface being inclined so that a first distance along the drive shaft from the side surface to said rotor at the hinge angular position is smaller than a second distance along the drive shaft from the side surface to said rotor at an angular position opposite to said hinge angular position, wherein said releasing means comprises:

a spring mounted on an outer surface of said fixed ring at an angular position corresponding to said hinge angular position; and

a wedge-like ring having a wedge-shape section, said wedge-like ring being elastically supported by said spring and disposed around said drive shaft, said wedge-like ring having an inclined side surface corresponding to, and being in contact with, said side surface, said wedge-like ring having an unbalanced weight around said drive shaft so that a weight is smaller at a half of the wedge-like ring on the side of the hinge angular position than at the other half, the wedge-like ring being diametrically moved along said side surface of said fixed ring to a direction toward the opposite side of the hinge angular position against the supporting force of said spring by an centrifugal force caused by rotation together with said drive shaft, and

wherein the stopper is formed as a protrusion at a position on the opposite side surface of said wedge-like ring, the stopper being moved in the direction of the drive axis by the movement of the wedge-shape ring by the centrifugal force.

Claim 7 (Currently Amended): The clutchless refrigerant compressor as claimed in ~~claim 3~~ claim 1, wherein said driver is an electromagnetic solenoid comprising a fixed magnetic core fixedly mounted on said drive shaft, an electric wire coil wound to the fixed magnetic core, and a movable magnetic core having the stopper and being movable with respect to the fixed magnetic core in a direction of the drive axis, said driver further comprising a solenoid driver connected to

said electric wire coil for energizing and disenergizing the electric wire coil in response to said physical factor as detected by said detector.

Claim 8 (Original): The clutchless refrigerant compressor as claimed in claim 7, wherein said electromagnetic solenoid further comprises a core urging spring for urging the movable magnetic core so that said stopper is positioned in the initial position, and wherein said solenoid driver does not energize the electric wire coil in a normal state but energizes the electric wire coil when the physical factor detected is determined to increase beyond a predetermined level of the factor, to move the stopper from the initial position against the urging force of the core urging spring in the direction of the drive axis to thereby permit said swash plate to move from said initial angle to the predetermined minimum angle due to the urging force.

Claim 9 (Original): The clutchless refrigerant compressor as claimed in claim 7, wherein said electromagnetic solenoid further comprises a core urging spring for urging the movable magnetic core so that said stopper is positioned at a remote position than the initial position as viewed from the rotor, wherein said solenoid driver energizes the electric wire coil in a normal state to maintain the stopper at the initial position against the core urging force but releases the energization of the electric wire coil to move the stopper from the initial position in the direction of the drive axis by the urging force of the core urging spring to thereby permit said swash plate to move from said initial angle to the predetermined minimum angle due to the urging force.

Claim 10 (Original): The clutchless refrigerant compressor as claimed in claim 4, wherein said detector is a pressure sensor for detecting a pressure in the discharge chamber.

Claim 11 (Original): The clutchless refrigerant compressor as claimed in claim 4, wherein said detector is a pressure sensor for detecting a difference in pressure between the discharge chamber and the suction chamber.

Claim 12 (Original): The clutchless refrigerant compressor as claimed in claim 4, wherein said detector is a temperature sensor for detecting a temperature of the compressor.

Claim 13 (Original): The clutchless refrigerant compressor as claimed in claim 4, wherein said compressor is charged therein with lubricating oil, and said detector is a temperature pressure sensor for detecting a temperature of the compressor.

Claim 14 (Original): The clutchless refrigerant compressor as claimed in claim 4, wherein said compressor is charged therein with lubricating oil, and said detector is a viscosity sensor for detecting a viscosity of the lubricating oil.

Claim 15 (Original): The clutchless refrigerant compressor as claimed in claim 4, wherein said detector is a temperature sensor for detecting an ambient temperature around the compressor.

Claim 16 (Original): The clutchless refrigerant compressor as claimed in claim 4, which is used in an automotive air conditioning system, wherein said detector is a temperature sensor for detecting a temperature within a room of the automotive vehicle.